Abstract

In many cases, the coating material of coated sheet metal has a significantly lower boiling point than the sheet metal material. Thus, an explosive vaporization of coating material can occur when sheet metal of this type is joined by welding, negatively affecting the quality of the connection. To improve the connection quality, narrow gaps are created by means of spacers, allowing the vaporized coating material to escape through said gaps. The spacers are created e.g. by the laser radiation of the sheet metal. The aim of the invention is to reduce the variations in distance between the sheet metal sheets by the appropriate shaping of the spacers. This is achieved by a method, in which the laser beam executes a movement comprising transverse and longitudinal components through and/or around the center of its processing surface. This creates a topographical modification with a spherical form, i.e. with an apex radius that is greater than the height of said topographical modification.
(Published with Fig. 2)